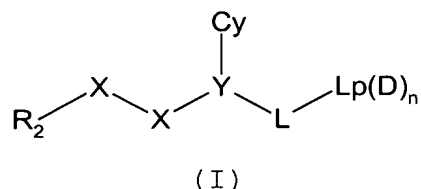


National Phase PCT/GB00/02302

Clean Pending Claims

1 (amended). A serine protease inhibitor compound of formula (I)



where R<sub>2</sub> represents

(i) phenyl optionally being substituted in the 3 and/or 4 position by halo, nitro, thiol, haloalkoxy, hydrazido, alkylhydrazido, amino, cyano, haloalkyl, alkylthio, alkenyl, alkynyl, acylamino, tri or difluoromethoxy, carboxy, acyloxy, MeSO<sub>2</sub>- or R<sub>1</sub>, and optionally substituted at the 6 position by amino, hydroxy, halo, alkyl, carboxy, alkoxycarbonyl, cyano, amido, aminoalkyl, alkoxy or alkylthio;

(ii) naphth-2-yl optionally substituted at the 6 or 7 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub> and optionally substituted at the 3 position by amino, hydroxy, halo, alkyl, carboxy, cyano, amido, aminoalkyl, alkoxy or alkylthio;

(iii) isoquinolin-7-yl, indol-5-yl, indol-6-yl, indazol-5-yl, indazol-6-yl, benzothiazol-6-yl or benzisoxazol-5-yl optionally substituted at the 3 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub>;

(iv) benzimidazol-5-yl or benzothiazol-6-yl optionally substituted at the 2 position by amino;

(v) thien-2-yl or thien-3-yl optionally substituted at the 4 or 5 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1</sub>;

(vi) 3,4-methylenedioxyphenyl, 2,3-dihydroindol-6-yl, 3,3-dichloro-2-oxo-indol-6-yl or 1-methyl-3-aminoindazol-5-yl;

(vii) benzothiazol-2-yl, imidazo[1,2-a]pyrimidin-2-yl or tetrahydroimidazo[1,2-a]pyrimidin-2-yl;

(viii) pyrazol-2-yl optionally substituted at the 5 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1</sub>;

(ix) pyrid-2-yl optionally substituted at the 5 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1</sub>;

(x) pyrid-3-yl optionally substituted at the 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1</sub>;

(xi) benzofur-2-yl optionally substituted at the 3 position by amino, hydroxy, halo, alkyl, carboxy, cyano, amido, aminoalkyl, alkoxy or alkylthio and at the 5 or 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub>;

(xii) indol-2-yl optionally substituted on the indole nitrogen atom by alkyl and optionally substituted at the 5 or 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub>;

(xiii) indol-6-yl substituted at the 5 position by amino, hydroxy, halo, alkyl, carboxy, alkoxycarbonyl, cyano, amido, aminoalkyl, alkoxy or alkylthio and optionally substituted at the 3 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub>; or

(xiv) benzo[b]thiophen-2-yl optionally substituted at the 3 position by amino, hydroxy, halo, alkyl, carboxy, cyano, amido, aminoalkyl, alkoxy or alkylthio and at the 5 or 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub>,

with the proviso that R<sub>2</sub> cannot be aminoisoquinolyl;

each X independently is a C, N, O or S atom or a CO, CR<sub>1a</sub>, C(R<sub>1a</sub>)<sub>2</sub> or NR<sub>1a</sub> group, at least one X being C, CO, CR<sub>1a</sub> or C(R<sub>1a</sub>)<sub>2</sub>;

each R<sub>1a</sub> independently represents hydrogen or hydroxyl, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxy carbonyl, alkylaminocarbonyl, alkoxy carbonyl amino, acyloxymethoxycarbonyl or alkylamino optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl;

R<sub>1</sub> is as defined for R<sub>1a</sub>, provided that R<sub>1</sub> is not unsubstituted aminoalkyl;

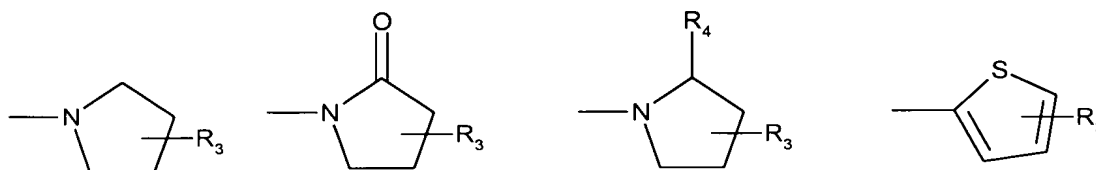
L is an organic linker group containing 1 to 5 backbone atoms selected from C, N, O and S, or a branched alkyl or cyclic group;

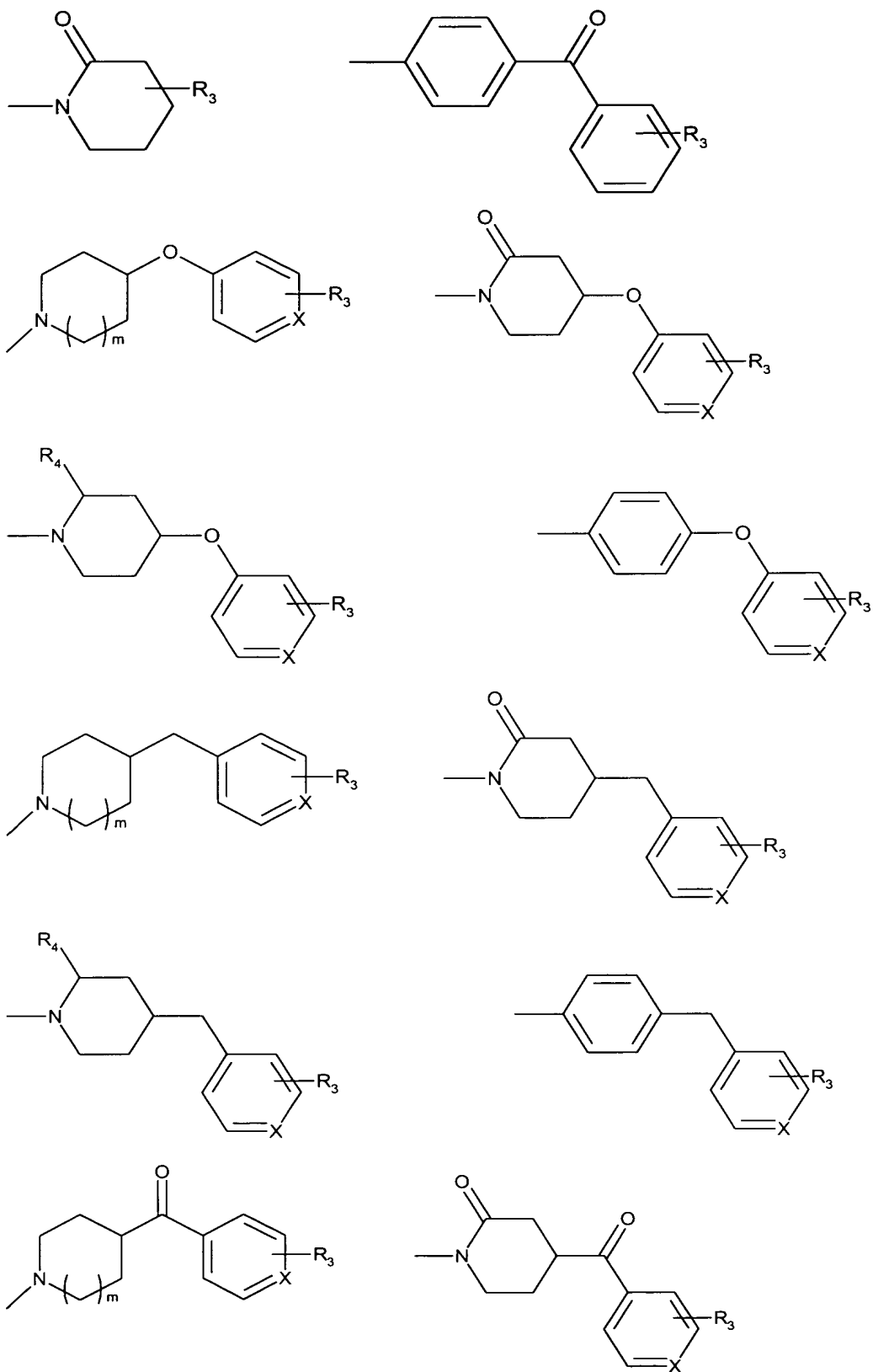
Y is a nitrogen atom or a CR<sub>1b</sub> group;

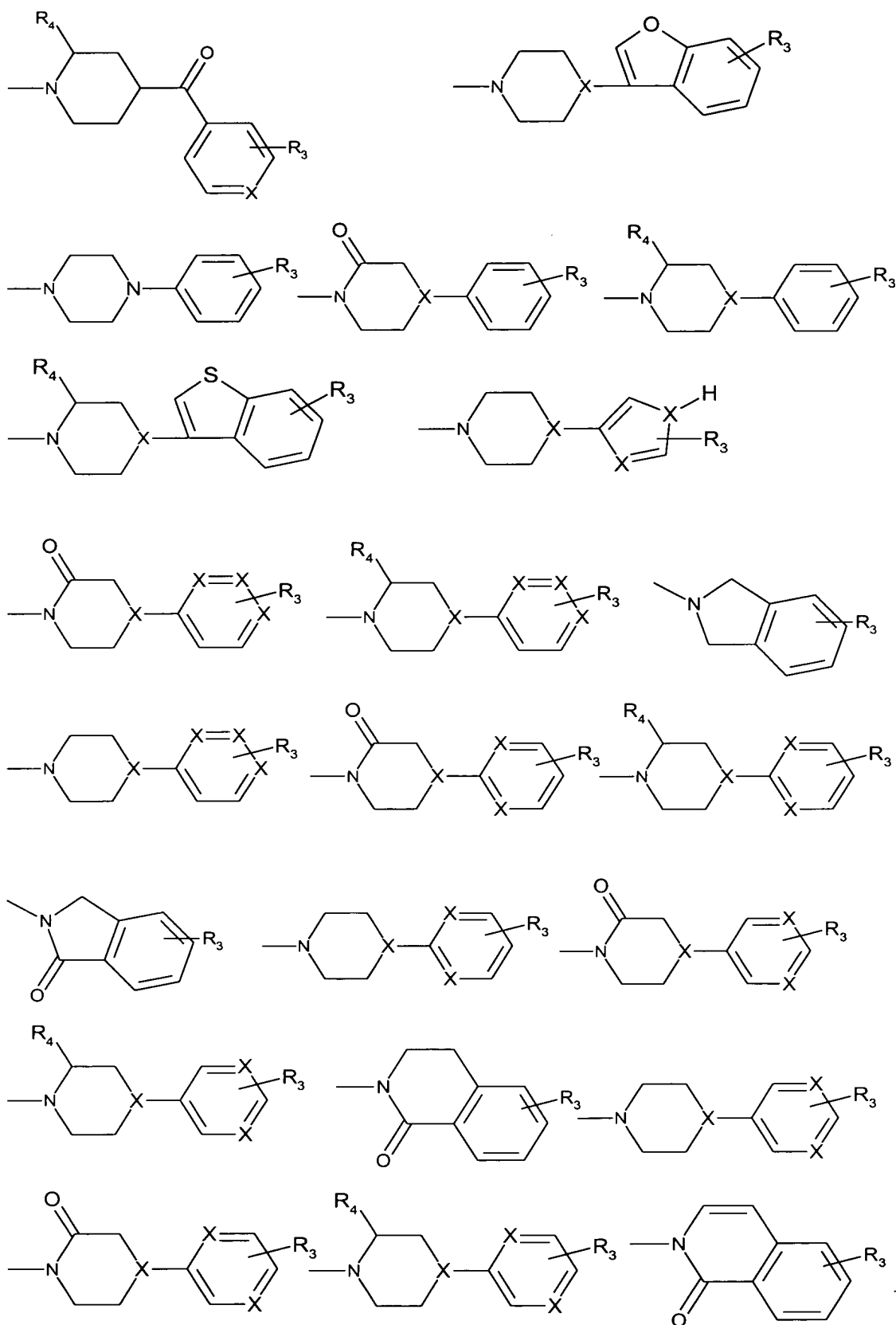
Cy is a saturated or unsaturated, mono or poly cyclic, homo or heterocyclic group optionally substituted by groups R<sub>3a</sub> or phenyl optionally substituted by R<sub>3a</sub>;

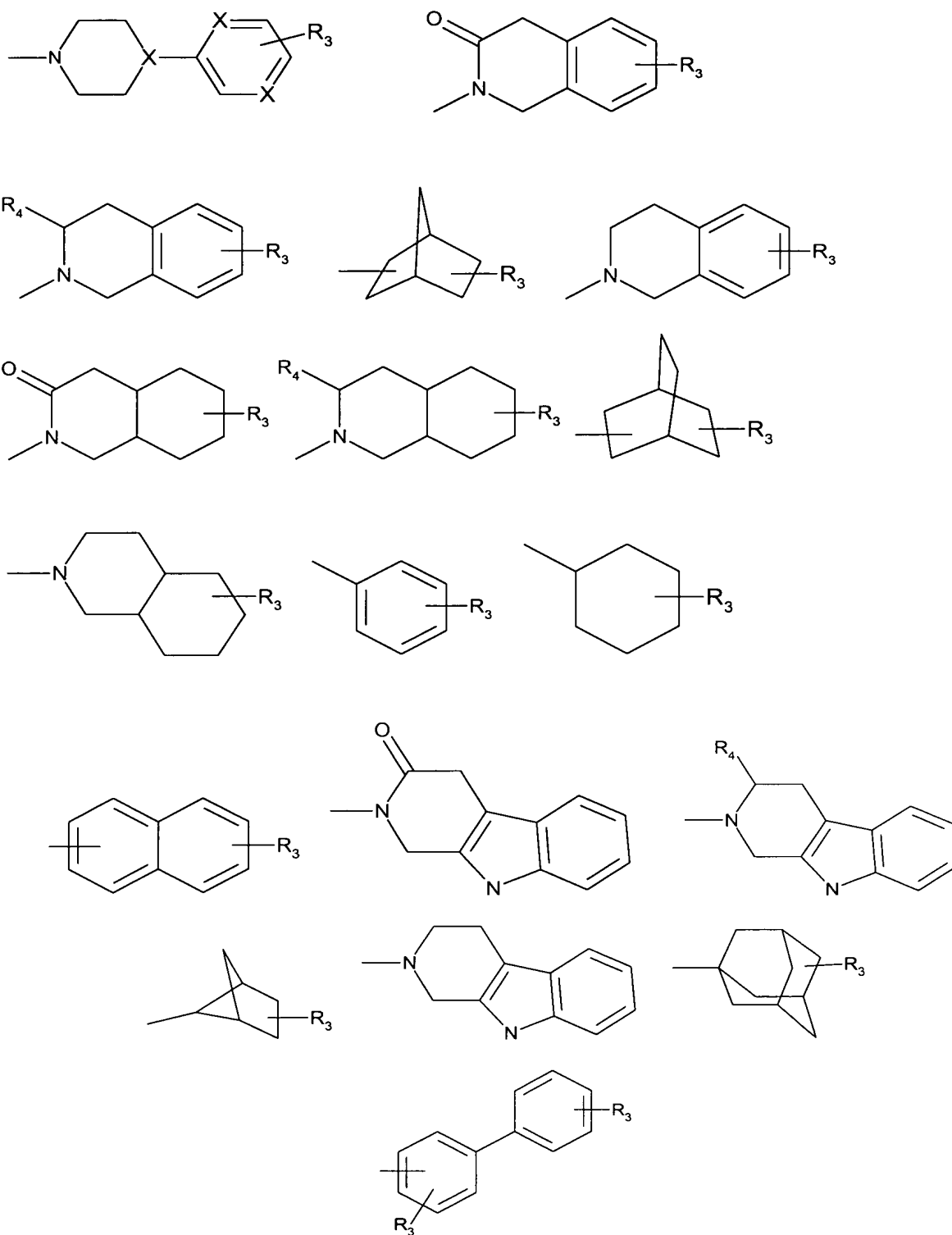
each R<sub>3a</sub> independently is R<sub>1c</sub>, amino, halo, cyano, nitro, thiol, alkylthio, alkylsulphonyl, alkylsulphenyl, triazolyl, imidazolyl, tetrazolyl, hydrazido, alkyl imidazolyl, thiazolyl, alkyl thiazolyl, alkyl oxazolyl, oxazolyl, alkylsulphonamido, alkylaminosulphonyl, aminosulphonyl, haloalkoxy and haloalkyl;

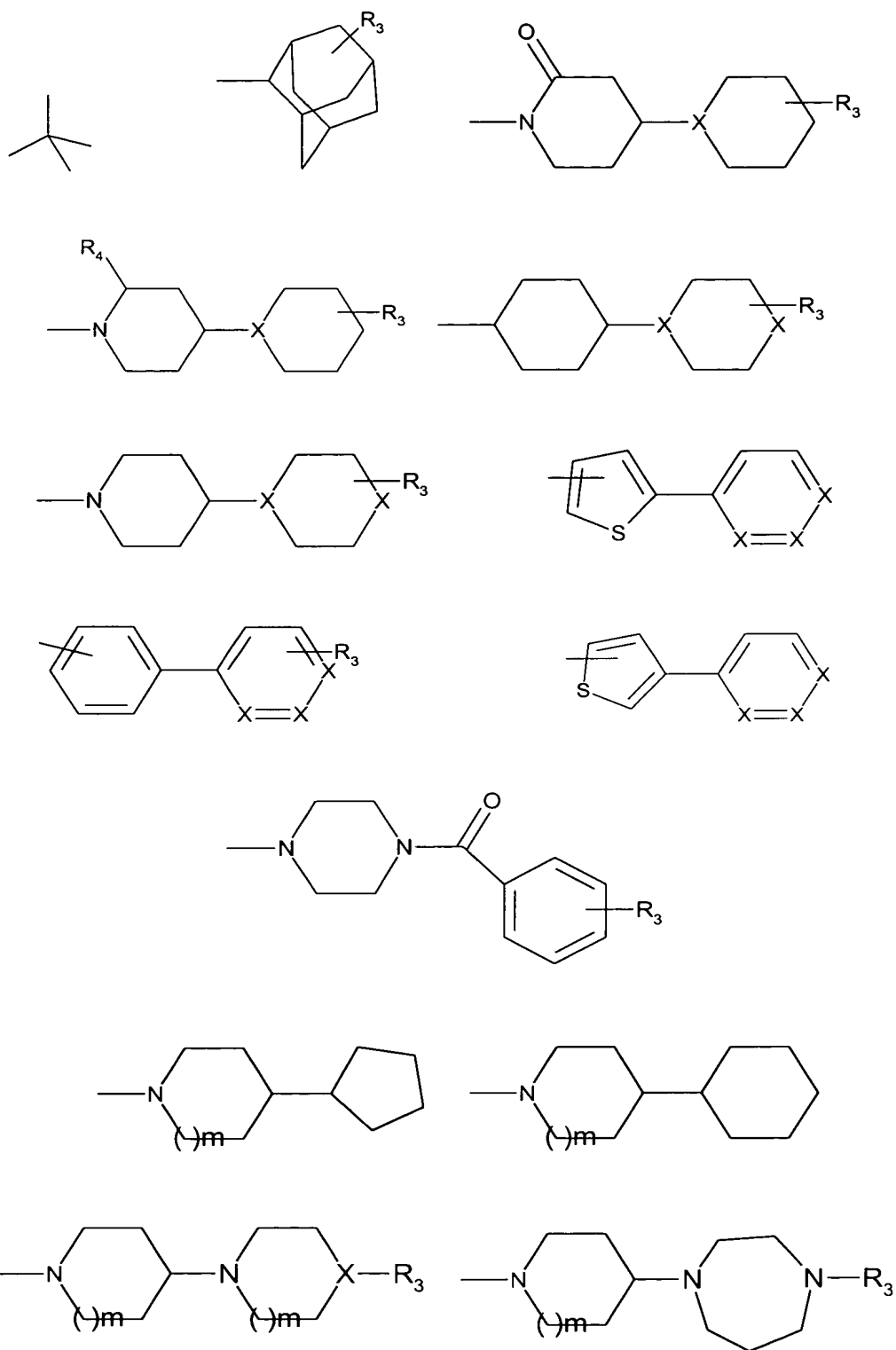
Lp is a lipophilic organic group selected from

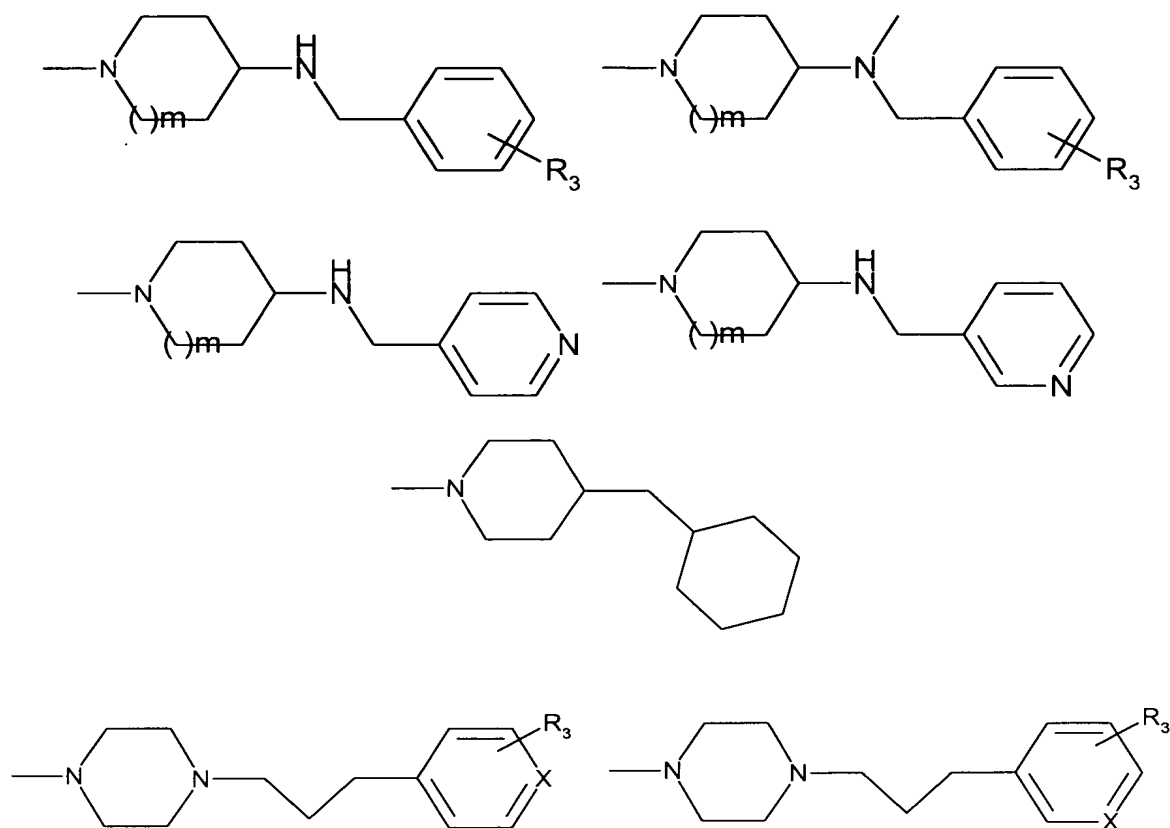












wherein  $R_3$  is as defined for  $R_{3a}$ ;

$m$  represents 0 or 1;

$R_4$  represents hydrogen,  $(CH_2)_wCOOH$  or  $(CH_2)_wCONH_2$ ;

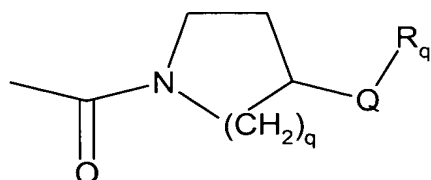
$w$  represents an integer from 0 to 4; and

$X$  represents CH or N;

$D$  is a hydrogen bond donor group; and  $n$  is 0;

or  $-L-Lp(D)_n$  is:

(i)



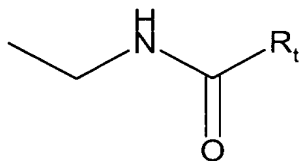
in which  $q$  is 1 or 2;

$Q$  is a direct bond; and  $R_q$  is piperidin-4-yl which may bear a  $C_{1-3}$ alkyl substituent at the 1-position; or  $R_q$  is  $NR_aR_b$



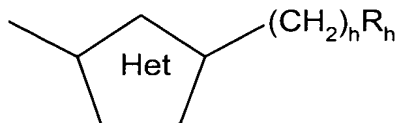
in which each of  $R_a$  and  $R_b$  independently is hydrogen or  $C_{1-3}$ alkyl; or one of  $R_a$  and  $R_b$  is hydrogen or methyl and the other of  $R_a$  and  $R_b$  is  $-CH_2-R_c$  or  $-CH_2-R_d$  in which  $R_c$  is pyridyl or phenyl (which phenyl may bear a fluoro, chloro, methyl,  $CONH_2$ ,  $SO_2NH_2$ , methylaminosulphonyl, dimethylaminosulphonyl, methylsulphonylamino, methoxy or methylsulphonyl substituent) and in which  $R_d$  is isopropyl or cyclopentyl, or  $NR_aR_b$  is pyrrolidino, piperidino, morpholino, piperazino, or tetrahydro-1,4-diazepino in which a pyrrolidino or piperidino may be a 3,4-didehydro derivative and in which a pyrrolidino, piperidino, piperazino, or tetrahydro-1,4-diazepino may bear a methyl group at the 4-position;

(ii)



in which  $R_t$  is phenyl (which phenyl may bear a fluoro, chloro,  $C_{1-4}$  alkyl, methoxy or methylsulphonyl substituent); or

(iii)



in which Het is a divalent 5 membered heteroaromatic group containing 1, 2 or 3 heteroatoms selected from O, N and S and having the two ring atoms at which it is connected separated by one ring atom;

$h$  is 0 or 1; and

$R_h$  is phenyl which may bear one or more  $R_3$  substituents;

and

$R_{1b}$ ,  $R_{1c}$  and  $R_{1j}$  are as defined for  $R_{1a}$ , or a physiologically tolerable salt thereof.

2. A compound as claimed in Claim 1, where

R<sub>2</sub> represents a 5 or 6 membered aromatic carbon ring optionally interrupted by a nitrogen, oxygen or sulphur ring atom, optionally being substituted in the 3 and/or 4 position by halo, nitro, haloalkoxy, amino, cyano, haloalkyl, alkylthio, alkenyl, alkynyl, acylamino, tri or difluoromethoxy, carboxy, acyloxy, MeSO<sub>2</sub>- or R<sub>1</sub>, or the substituents at the 3 and 4 positions taken together form a fused ring which is a 5 or 6 membered carbocyclic or heterocyclic ring optionally substituted by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub>, and optionally substituted in the position alpha to the X-X.. group (i.e. 6 position for a six membered aromatic ring etc) by amino, hydroxy, halo, alkyl, carboxy, cyano, amido, aminoalkyl, alkoxy or alkylthio with the proviso that R<sub>2</sub> cannot be aminoisoquinolyl; and

each R<sub>1a</sub> independently represents hydrogen or hydroxyl, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxycarbonyl, acyloxymethoxycarbonyl or alkylamino optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl.

3. (Cancelled on national phase entry)

4 (amended). A compound as claimed in Claim 1, in which X-X is selected from -CH=CH-, -CONH-, -CONR<sub>1a</sub>-, -NH-CO-, -NH-CH<sub>2</sub>-, -CH<sub>2</sub>-NH-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -COO-, -OC=O- and -CH<sub>2</sub>CH<sub>2</sub>-.

5. A compound as claimed in Claim 4, in which X-X is CONH.

6 (amended). A compound as claimed in Claim 1, in which Y is a CR<sub>1b</sub> group and has the conformation that would result from

construction from a D- $\alpha$ -aminoacid  $\text{NH}_2\text{-CR}_{1b}(\text{Cy})\text{-COOH}$  where the  $\text{NH}_2$  represents part of X-X.

7 (amended). A compound as claimed in any one of Claims 1, 2, 4, 5 and 6, in which Y is CH.

8 (amended). A compound as claimed in Claim 7, in which Cy represents an optionally  $\text{R}_{3a}$  substituted phenyl, pyridyl, thienyl, thiazolyl, naphthyl, piperidiny1 or cycloalkyl group.

9. A compound as claimed in Claim 8, in which  $\text{R}_{3a}$  is selected from hydrogen, hydroxyl, methoxy, ethoxy, methyl, ethyl, methylaminomethyl, dimethylaminomethyl, hydroxymethyl, carboxy, methoxymethyl, methoxycarbonyl, ethoxycarbonyl, methylaminocarbonyl, dimethylamino-carbonyl, aminomethyl,  $\text{CONH}_2$ ,  $\text{CH}_2\text{CONH}_2$ , acetyl amino, methoxycarbonylamino, ethoxycarbonylamino, t-butoxycarbonylamino, amino, fluoro, chloro, cyano, nitro, thiol, methylthio, methylsulphonyl, ethylsulphonyl, methylsulphenyl, methylsulphonylamido, ethylsulphonylamido, methylaminosulphonyl, ethylaminosulphonyl, aminosulphonyl, trifluoromethoxy and trifluoromethyl.

10 (amended). A compound as claimed in Claim 1, in which Cy is phenyl, 4-aminophenyl, 4-amidophenyl, 4-(N-methyl)amido-phenyl, 4-(N,N-dimethyl)amidophenyl, 2-chlorophenyl, 2-methylphenyl, 2-fluorophenyl, 3-fluorophenyl, 4-fluorophenyl, 4-hydroxyphenyl, 2-methoxyphenyl, 4-methoxy-phenyl, 4-carboxyphenyl, 3-ethylsulphonylaminophenyl, thien-2-yl, thien-3-yl, thiazol-4-yl, thiazol-5-yl, 2-methylthiazol-4-yl, pyrid-2-yl, pyrid-3-yl, pyrid-4-yl, piperidin-4-yl, 1-methylpiperidin-4-yl, cyclohexyl or naphth-1-yl.

11 (amended). A compound as claimed in Claim 1, in which L represents CO, CH<sub>2</sub>NH, CONR<sub>1d</sub>(CH<sub>2</sub>)<sub>m</sub>, (CH<sub>2</sub>)<sub>m</sub>N(R<sub>1d</sub>)CO(CH<sub>2</sub>)<sub>m</sub>, (CH<sub>2</sub>)<sub>m+2</sub>, CO(CH<sub>2</sub>)<sub>m</sub>, (CH<sub>2</sub>)<sub>m</sub>CO, (CH<sub>2</sub>)<sub>m</sub>OC=O, (CH<sub>2</sub>)<sub>m</sub>O, CH=CH(CH<sub>2</sub>)<sub>m</sub>, SO<sub>2</sub>, SO<sub>2</sub>NR<sub>1d</sub>, SO<sub>2</sub>(CH<sub>2</sub>)<sub>m</sub>, (CH<sub>2</sub>)<sub>m</sub>SO<sub>2</sub> or (CH<sub>2</sub>)<sub>m</sub>SO<sub>2</sub>NR<sub>1d</sub> (where each m is independently 0 or 1 and R<sub>1d</sub> is as defined for R<sub>1a</sub>).

12. A compound as claimed in Claim 11, in which L is CO, CONH, CH<sub>2</sub>NHCO and CONHCH<sub>2</sub>.

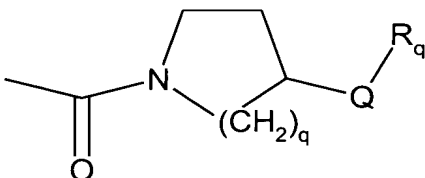
13. (Cancelled on national phase entry)

14. (Cancelled on national phase entry)

15. (Cancelled on national phase entry)

16 (amended). A compound as claimed in Claim 1, in which in -L-Lp(D)<sub>n</sub> is:

(i)

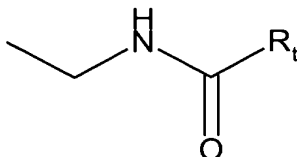


in which q is 1 or 2;

Q is a direct bond; and R<sub>q</sub> is piperidin-4-yl which may bear a C<sub>1-3</sub>alkyl substituent at the 1-position; or R<sub>q</sub> is NR<sub>a</sub>R<sub>b</sub> in which each of R<sub>a</sub> and R<sub>b</sub> independently is hydrogen or C<sub>1-3</sub>alkyl; or one of R<sub>a</sub> and R<sub>b</sub> is hydrogen or methyl and the other of R<sub>a</sub> and R<sub>b</sub> is -CH<sub>2</sub>-R<sub>c</sub> or -CH<sub>2</sub>-R<sub>d</sub> in which R<sub>c</sub> is pyridyl or phenyl (which phenyl may bear a fluoro, chloro, methyl, CONH<sub>2</sub>, SO<sub>2</sub>NH<sub>2</sub>, methylaminosulphonyl, dimethylaminosulphonyl, methylsulphonylamino, methoxy or methylsulphonyl substituent)

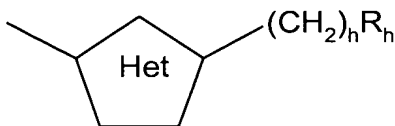
and in which  $R_d$  is isopropyl or cyclopentyl, or  $NR_aR_b$  is pyrrolidino, piperidino, morpholino, piperazino, or tetrahydro-1,4-diazepino in which a pyrrolidino or piperidino may be a 3,4-didehydro derivative and in which a pyrrolidino, piperidino, piperazino, or tetrahydro-1,4-diazepino may bear a methyl group at the 4-position;

(ii)



in which  $R_t$  is phenyl (which phenyl may bear a fluoro, chloro,  $C_{1-4}$  alkyl, methoxy or methylsulphonyl substituent); or

(iii)



in which Het is a divalent 5 membered heteroaromatic group containing 1, 2 or 3 heteroatoms selected from O, N and S and having the two ring atoms at which it is connected separated by one ring atom;

$h$  is 0 or 1; and

$R_h$  is phenyl which may bear one or more  $R_3$  substituents.

17 (amended). A compound as claimed in Claim 16, in which

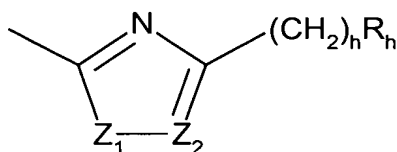
(i)  $q$  is 2, and

$R_q$  is piperidin-4-yl which may bear a (1-3C)alkyl substituent at the 1-position;

(iii)  $R_h$  is phenyl which may bear one or more  $R_3$  substituents independently selected from, for an ortho or a para substituent:  $C_{1-5}$  alkyl, fluoro, chloro, difluoromethyl, trifluoromethyl, methoxy, dimethylamino, methylsulphonyl, and

C<sub>1-2</sub> acyl, and for a meta substituent: fluoro, chloro and methyl.

18 (amended). A compound as claimed in Claim 1, in which -L-Lp(D)<sub>n</sub> is



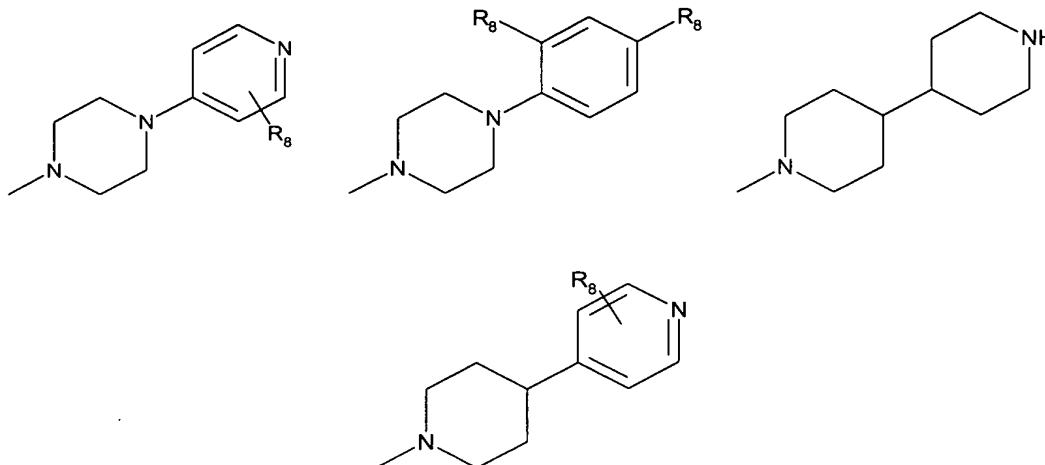
in which R<sub>h</sub> is phenyl which may bear an ortho and/or a para substituent independently selected from, for an ortho: methyl, fluoro, chloro, methylsulphonyl and acetyl, and for a para substituent: methyl, fluoro, chloro, methoxy and dimethylamino;

Z<sub>1</sub> is S, Z<sub>2</sub> is CH, h is 0; or

Z<sub>1</sub> is NH, Z<sub>2</sub> is N, h is 1.

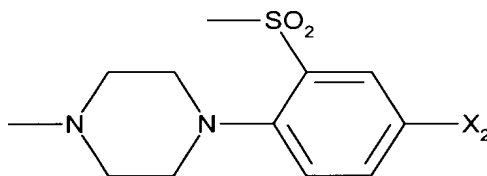
19 (amended). A compound as claimed in Claim 1, in which R<sub>3</sub> is selected from hydrogen, hydroxyl, methoxy, ethoxy, methyl, ethyl, propyl, 2-propyl, butyl, 2-butyl, t-butyl, pentyl, 2-pentyl or 3-pentyl, isopropylaminomethyl, dimethylaminomethyl, diethylaminomethyl, dimethylaminoethyl, acetyl, hydroxymethyl, hydroxyethyl, carboxy, methoxymethyl, methoxycarbonyl, ethoxycarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, aminomethyl, aminocarbonyl, methylamino, dimethylamino, ethylamino, formylamino, acetylamino, amino, fluoro, chloro, cyano, nitro, thiol, methylthio, methylsulphonyl, ethylsulphonyl, isopropylsulphonyl, methylsulphenyl, 1,2,4-triazol-2-yl, 1,2,4-triazol-4-yl, 1,2,3-triazol-4-yl, 1,3-imidazol-1-yl or 1,3-imidazol-4-yl, tetrazol-1-yl, tetrazol-5-yl; methylsulphonamido, ethylsulphonamido, propylsulphonamido, methylaminosulphonyl, ethylaminosulphonyl, propylaminosulphonyl, aminosulphonyl, trifluoromethoxy, trifluoromethyl and trichloromethyl.

20 (amended). A compound as claimed in Claim 1, in which Lp is selected from



where R<sub>8</sub> represents H, OMe, SO<sub>2</sub>Me, F, cyano, amido, amino, NO<sub>2</sub>, Cl or OH.

21 (amended). A compound as claimed in Claim 1, in which Lp represents



(K)

wherein X<sub>2</sub> is halo, hydrogen, amino, nitro or CONH<sub>2</sub>.

22. (Cancelled on national phase entry)

23 (amended). A compound as claimed in Claim 1, in which R<sub>2</sub> represents:

(i) phenyl optionally being substituted in the 3 and/or 4 position by fluoro, chloro, bromo, iodo, nitro, difluoromethoxy, trifluoromethoxy, amino, cyano,

trifluoromethyl, methylthio, vinyl, carboxy, acetoxy, MeSO<sub>2</sub>-, hydroxy, methoxy, ethoxy, methyl, methoxycarbonyl, methylamino, ethylamino or amido, and optionally substituted at the 6 position by amino, hydroxy, fluoro, methoxycarbonyl, cyano or aminomethyl;

(ii) naphth-2-yl optionally substituted at the 6, position by hydroxy and optionally substituted at the 3 position by amino or hydroxy;

(iii) isoquinolin-7-yl, indol-5-yl, indol-6-yl, indazol-5-yl, indazol-6-yl, benzothiazol-6-yl or benzisoxazol-5-yl optionally substituted at the 3 position by chloro, bromo, amino, methyl or methoxy;

(iv) benzimidazol-5-yl or benzothiazol-6-yl optionally substituted at the 2 position by amino;

(v) thien-2-yl or thien-3-yl optionally substituted at the 4 or 5 position by methylthio, methyl or acetyl;

(vi) 3,4-methylenedioxyphenyl, 2,3-dihydroindol-6-yl, 3,3-dichloro-2-oxo-indol-6-yl or 1-methyl-3-aminoindazol-5-yl;

(vii) benzothiazol-2-yl, imidazo[1,2-a]pyrimidin-2-yl or tetrahydroimidazo[1,2-a]pyrimidin-2-yl;

(viii) pyrazol-2-yl substituted at the 5 position by methyl;

(ix) pyrid-2-yl optionally substituted at the 6 position by chloro;

(x) pyrid-3-yl optionally substituted at the 4 position by chloro;

(xi) benzofur-2-yl optionally substituted at the 3 position by chloro, methyl or methoxy, at the 5 or 6 position by methyl and at the 6 position by methoxy;

(xii) indol-2-yl optionally substituted on the indole nitrogen atom by methyl and optionally substituted at the 5 or 6 position by fluoro, chloro, bromo, methyl or methoxy;



(xiii) indol-6-yl substituted at the 5 position by chloro, fluoro or hydroxy and optionally substituted at the 3 position by chloro or methyl; or

(xiv) benzo[b]thiophen-2-yl optionally substituted at the 3 position by fluoro, chloro or methyl, and optionally substituted at the 5 or 6 position by fluoro, chloro, methyl, hydroxy, or methoxy.

24 (amended). A compound as claimed in Claim 23, in which R<sub>2</sub> represents indol-6-yl optionally substituted at the 3 position by chloro, bromo, methyl or methoxy or indol-6-yl substituted at the 5 position by chloro, fluoro or hydroxy and optionally substituted at the 3 position by chloro or methyl.

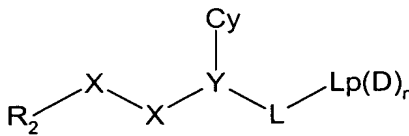
25. (Cancelled on national phase entry)

26. (Cancelled on national phase entry)

27. A pharmaceutical composition, which comprises a compound as claimed in Claim 1 together with at least one pharmaceutically acceptable carrier or excipient.

28 (new). A compound as claimed in Claim 23, in which R<sub>2</sub> represents phenyl substituted in the 4 position by chloro, amino, vinyl, methylamino, methyl or methoxy, optionally at the 3 position with amino or hydroxy, and optionally at the 6 position with amino or hydroxy.

29 (new). A serine protease inhibitor compound of formula (I)



(I)

where R<sub>2</sub> represents

(i) phenyl optionally being substituted in the 3 and/or 4 position by halo, nitro, thiol, haloalkoxy, hydrazido, alkylhydrazido, amino, cyano, haloalkyl, alkylthio, alkenyl, alkynyl, acylamino, tri or difluoromethoxy, carboxy, acyloxy, MeSO<sub>2</sub>- or R<sub>1</sub>, and optionally substituted at the 6 position by amino, hydroxy, halo, alkyl, carboxy, alkoxycarbonyl, cyano, amido, aminoalkyl, alkoxy or alkylthio;

(ii) naphth-2-yl optionally substituted at the 6 or 7 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub> and optionally substituted at the 3 position by amino, hydroxy, halo, alkyl, carboxy, cyano, amido, aminoalkyl, alkoxy or alkylthio;

(iii) isoquinolin-7-yl, indol-5-yl, indol-6-yl, indazol-5-yl, indazol-6-yl, benzothiazol-6-yl or benzisoxazol-5-yl optionally substituted at the 3 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1j</sub>;

(iv) benzimidazol-5-yl or benzothiazol-6-yl optionally substituted at the 2 position by amino;

(v) thien-2-yl or thien-3-yl optionally substituted at the 4 or 5 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1</sub>;

(vi) 3,4-methylenedioxyphenyl, 2,3-dihydroindol-6-yl, 3,3-dichloro-2-oxo-indol-6-yl or 1-methyl-3-aminoindazol-5-yl;

(vii) benzothiazol-2-yl, imidazo[1,2-a]pyrimidin-2-yl or tetrahydroimidazo[1,2-a]pyrimidin-2-yl;

(viii) pyrazol-2-yl optionally substituted at the 5 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1</sub>;

(ix) pyrid-2-yl optionally substituted at the 5 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R<sub>1</sub>;

(x) pyrid-3-yl optionally substituted at the 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or  $R_1$ ;

(xi) benzofur-2-yl optionally substituted at the 3 position by amino, hydroxy, halo, alkyl, carboxy, cyano, amido, aminoalkyl, alkoxy or alkylthio and at the 5 or 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or  $R_{1j}$ ;

(xii) indol-2-yl optionally substituted on the indole nitrogen atom by alkyl and optionally substituted at the 5 or 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or  $R_{1j}$ ;

(xiii) indol-6-yl substituted at the 5 position by amino, hydroxy, halo, alkyl, carboxy, alkoxycarbonyl, cyano, amido, aminoalkyl, alkoxy or alkylthio and optionally substituted at the 3 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or  $R_{1j}$ ; or

(xiv) benzo[b]thiophen-2-yl optionally substituted at the 3 position by amino, hydroxy, halo, alkyl, carboxy, cyano, amido, aminoalkyl, alkoxy or alkylthio and at the 5 or 6 position by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or  $R_{1j}$ ,

with the proviso that  $R_2$  cannot be aminoisoquinolyl;

each X independently is a C, N, O or S atom or a CO,  $CR_{1a}$ ,  $C(R_{1a})_2$  or  $NR_{1a}$  group, at least one X being C, CO,  $CR_{1a}$  or  $C(R_{1a})_2$ ;

each  $R_{1a}$  independently represents hydrogen or hydroxyl, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl, alkoxycarbonylamino, acyloxymethoxycarbonyl or alkylamino optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl;

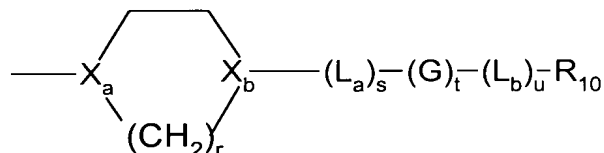
$R_1$  is as defined for  $R_{1a}$ , provided that  $R_1$  is not unsubstituted aminoalkyl;

Y is a nitrogen atom or a CR<sub>1b</sub> group;

Cy is a saturated or unsaturated, mono or poly cyclic, homo or heterocyclic group optionally substituted by groups R<sub>3a</sub> or phenyl optionally substituted by R<sub>3a</sub>;

each R<sub>3a</sub> independently is R<sub>1c</sub>, amino, halo, cyano, nitro, thiol, alkylthio, alkylsulphonyl, alkylsulphenyl, triazolyl, imidazolyl, tetrazolyl, hydrazido, alkyl imidazolyl, thiazolyl, alkyl thiazolyl, alkyl oxazolyl, oxazolyl, alkylsulphonamido, alkylaminosulphonyl, aminosulphonyl, haloalkoxy and haloalkyl;

Lp is group of formula:



in which:

r is 1 or 2;

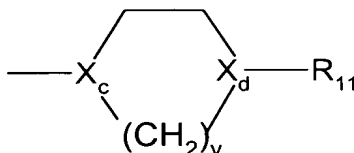
one of X<sub>a</sub> and X<sub>b</sub> is N and the other is CH or N provided that when r is 1, X<sub>a</sub> and X<sub>b</sub> are not both N;

s, t and u are each 0 or 1;

L<sub>a</sub> and L<sub>b</sub> are each independently selected from a single bond, C=O, O and NR<sub>1e</sub>, in which R<sub>1e</sub> is hydrogen or (1-6C)alkyl;

G is (1-6C)alkanediyl; and

R<sub>10</sub> is (1-6C)alkyl, (3-6C)cycloalkyl which is unsubstituted or substituted by (1-6C)alkyl, indanyl, pyridyl, tetrahydropyranyl, tetrahydrothiopyranyl, phenyl which is unsubstituted or substituted by one or two R<sub>3</sub> groups, pyrrolinyl, or a group of formula

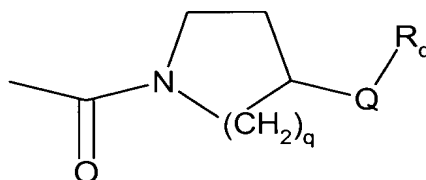


in which  $v$  is 1, 2 or 3; one of  $X_C$  and  $X_D$  is N and the other is CH or N, provided that when  $v$  is 1,  $X_C$  and  $X_D$  are not both N; and  $R_{11}$  is hydrogen, (1-6C)alkyl or when  $X_D$  is CH, hydroxy(1-6C)alkyl; provided that when  $t$  is 0, the sum of  $s$  and  $u$  is 1; when  $X_B$  is N,  $L_A$  is a bond or C=O; when  $X_C$  is N,  $L_B$  is a bond or C=O; when  $X_B$  and  $X_C$  are both N,  $t$  is 1; and when  $(L_A)_s-(G)_t-(L_B)_u$  represents an alkyl group and  $X_B$  and  $X_C$  both represent N, the alkyl group contains at least two chain carbon atoms,

where  $L$  is CO or  $CH_2CO$ , when  $X_A$  is N, or  $L$  is CONH,  $CONHCH_2$  or  $CH_2NHCO$  when  $X_A$  is CH;

but excluding compounds in which  $-L-L_p(D)_n$  is:

(i)



in which  $q$  is 1 or 2;

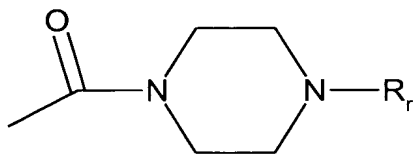
(a)  $Q$  is  $-O-$  or  $-NH-$ ; and  $R_q$  is  $R_C$ ; or

(b)  $Q$  is methylene; and  $R_q$  is  $NR_aR_b$ ;

each of  $R_a$  and  $R_b$  independently is hydrogen or  $C_{1-3}$ alkyl; or one of  $R_a$  and  $R_b$  is hydrogen or methyl and the other of  $R_a$  and  $R_b$  is  $-CH_2-R_C$  or  $-CH_2-R_D$  in which  $R_C$  is pyridyl or phenyl (which phenyl may bear a fluoro, chloro, methyl,  $CONH_2$ ,  $SO_2NH_2$ , methylaminosulphonyl, dimethylaminosulphonyl, methylsulphonylamino, methoxy or methylsulphonyl substituent) and in which  $R_D$  is isopropyl or cyclopentyl, or  $NR_aR_b$  is pyrrolidino, piperidino, morpholino, piperazino, or tetrahydro-1,4-diazepino in which a pyrrolidino or piperidino may be a 3,4-didehydro derivative and in which a pyrrolidino,

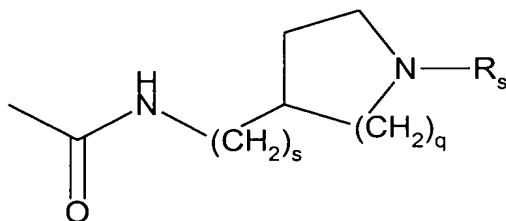
piperidino, piperazino, or tetrahydro-1,4-diazepino may bear a methyl group at the 4-position;

(ii)



in which  $R_r$  is  $-(CH_2)_c-R_C$ ,  $-CHReR_f$ ,  $-CH_2-CHReR_f$ , or  $R_g$  in which  $c$  is 1 or 2 and  $R_C$  is defined as above; each of  $R_e$  and  $R_f$  independently is hydrogen or  $C_{1-3}$ alkyl; or  $CHReR_f$  is cyclopentyl (which may bear a methyl, ethyl or hydroxymethyl substituent at the 3- or 4-position), cyclohexyl (which may bear a methyl, ethyl or hydroxymethyl substituent at the 3- or 4-position), tetrahydropyran-4-yl, tetrahydrothiopyran-4-yl, pyrrolidin-3-yl (which may bear a 1-methyl substituent), piperidin-4-yl (which may bear a 1-methyl substituent), or indan-2-yl; and  $R_g$  is 2-methylsulphonylphenyl which may bear a 4-fluoro substituent or  $R_g$  is  $\lambda^6$ -1,1-dioxobenzo[b]thiophen-7-yl;

(iii)

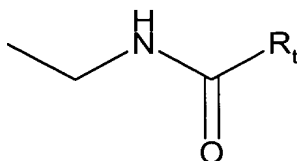


in which  $q$  is 1 or 2;

$s$  is 0 or 1; and

$R_s$  is  $-(CH_2)_c-R_C$ ,  $-CHReR_f$ , or  $-CH_2-CHReR_f$  each of which is defined as above; or

(iv)



in which  $R_t$  is piperidin-4-yl, piperidin-3-yl or pyrrolidin-3-yl, any of which may bear a  $C_{1-3}$  alkyl substituent at the 1-position;

D is a hydrogen bond donor group; and n is 0;  
and

$R_{1b}$ ,  $R_{1c}$  and  $R_{1j}$  are as defined for  $R_{1a}$ ,  
or a physiologically tolerable salt thereof.

30 (new). A compound as claimed in Claim 29 in which X-X is selected from -CH=CH-, -CONH-, -CONR<sub>1a</sub>-, -NH-CO-, -NH-CH<sub>2</sub>-, -CH<sub>2</sub>-NH-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -COO-, -OC=O- and -CH<sub>2</sub>CH<sub>2</sub>-.

31 (new). A compound as claimed in Claim 30, in which X-X is CONH.

32 (new). A compound as claimed in Claim 29, in which Y is a CR<sub>1b</sub> group and has the conformation that would result from construction from a D- $\alpha$ -aminoacid NH<sub>2</sub>-CR<sub>1b</sub>(Cy)-COOH where the NH<sub>2</sub> represents part of X-X.

33 (new). A compound as claimed in any one of Claims 29-32, in which Y is CH.

34 (new). A compound as claimed in Claim 33, in which Cy represents an optionally R<sub>3a</sub> substituted phenyl, pyridyl, thienyl, thiazolyl, naphthyl, piperidinyl or cycloalkyl group.

35 (new). A compound as claimed in Claim 34, in which R<sub>3a</sub> is selected from hydrogen, hydroxyl, methoxy, ethoxy, methyl, ethyl, methylaminomethyl, dimethylaminomethyl, hydroxymethyl, carboxy, methoxymethyl, methoxycarbonyl, ethoxycarbonyl, methylaminocarbonyl, dimethylamino-carbonyl, aminomethyl, CONH<sub>2</sub>, CH<sub>2</sub>CONH<sub>2</sub>, acetyl amino,

methoxycarbonylamino, ethoxycarbonylamino, t-butoxycarbonylamino, amino, fluoro, chloro, cyano, nitro, thiol, methylthio, methylsulphonyl, ethylsulphonyl, methylsulphenyl, methylsulphonylamido, ethylsulphonylamido, methylaminosulphonyl, ethylaminosulphonyl, aminosulphonyl, trifluoromethoxy and trifluoromethyl.

36 (new). A compound as claimed in Claim 29, in which Cy is phenyl, 4-aminophenyl, 4-amidophenyl, 4-(N-methyl)amidophenyl, 4-(N,N-dimethyl)amidophenyl, 2-chlorophenyl, 2-methylphenyl, 2-fluorophenyl, 3-fluorophenyl, 4-fluorophenyl, 4-hydroxyphenyl, 2-methoxyphenyl, 4-methoxyphenyl, 4-carboxyphenyl, 3-ethylsulphonylaminophenyl, thien-2-yl, thien-3-yl, thiazol-4-yl, thiazol-5-yl, 2-methylthiazol-4-yl, pyrid-2-yl, pyrid-3-yl, pyrid-4-yl, piperidin-4-yl, 1-methylpiperidin-4-yl, cyclohexyl or naphth-1-yl.

37 (new). A compound as claimed in Claim 29, in which R<sub>3</sub> is selected from hydrogen, hydroxyl, methoxy, ethoxy, methyl, ethyl, propyl, 2-propyl, butyl, 2-butyl, t-butyl, pentyl, 2-pentyl or 3-pentyl, isopropylaminomethyl, dimethylaminomethyl, diethylaminomethyl, dimethylaminoethyl, acetyl, hydroxymethyl, hydroxyethyl, carboxy, methoxymethyl, methoxycarbonyl, ethoxycarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, aminomethyl, aminocarbonyl, methylamino, dimethylamino, ethylamino, formylamino, acetylamino, amino, fluoro, chloro, cyano, nitro, thiol, methylthio, methylsulphonyl, ethylsulphonyl, isopropylsulphonyl, methylsulphenyl, 1,2,4-triazol-2-yl, 1,2,4-triazol-4-yl, 1,2,3-triazol-4-yl, 1,3-imidazol-1-yl or 1,3-imidazol-4-yl, tetrazol-1-yl, tetrazol-5-yl; methylsulphonamido, ethylsulphonamido, propylsulphonamido, methylaminosulphonyl, ethylaminosulphonyl, propylaminosulphonyl, aminosulphonyl, trifluoromethoxy, trifluoromethyl and trichloromethyl.



38 (new). A compound as claimed in Claim 29, in which R<sub>2</sub> represents:

(i) phenyl optionally being substituted in the 3 and/or 4 position by fluoro, chloro, bromo, iodo, nitro, difluoromethoxy, trifluoromethoxy, amino, cyano, trifluoromethyl, methylthio, vinyl, carboxy, acetoxy, MeSO<sub>2</sub>-, hydroxy, methoxy, ethoxy, methyl, methoxycarbonyl, methylamino, ethylamino or amido, and optionally substituted at the 6 position by amino, hydroxy, fluoro, methoxycarbonyl, cyano or aminomethyl;

(ii) naphth-2-yl optionally substituted at the 6, position by hydroxy and optionally substituted at the 3 position by amino or hydroxy;

(iii) isoquinolin-7-yl, indol-5-yl, indol-6-yl, indazol-5-yl, indazol-6-yl, benzothiazol-6-yl or benzisoxazol-5-yl optionally substituted at the 3 position by chloro, bromo, amino, methyl or methoxy;

(iv) benzimidazol-5-yl or benzothiazol-6-yl optionally substituted at the 2 position by amino;

(v) thien-2-yl or thien-3-yl optionally substituted at the 4 or 5 position by methylthio, methyl or acetyl;

(vi) 3,4-methylenedioxyphenyl, 2,3-dihydroindol-6-yl, 3,3-dichloro-2-oxo-indol-6-yl or 1-methyl-3-aminoindazol-5-yl;

(vii) benzothiazol-2-yl, imidazo[1,2-a]pyrimidin-2-yl or tetrahydroimidazo[1,2-a]pyrimidin-2-yl;

(viii) pyrazol-2-yl substituted at the 5 position by methyl;

(ix) pyrid-2-yl optionally substituted at the 6 position by chloro;

(x) pyrid-3-yl optionally substituted at the 4 position by chloro;

(xi) benzofur-2-yl optionally substituted at the 3 position by chloro, methyl or methoxy, at the 5 or 6 position by methyl and at the 6 position by methoxy;

(xii) indol-2-yl optionally substituted on the indole nitrogen atom by methyl and optionally substituted at the 5 or 6 position by fluoro, chloro, bromo, methyl or methoxy;

(xiii) indol-6-yl substituted at the 5 position by chloro, fluoro or hydroxy and optionally substituted at the 3 position by chloro or methyl; or

(xiv) benzo[b]thiophen-2-yl optionally substituted at the 3 position by fluoro, chloro or methyl, and optionally substituted at the 5 or 6 position by fluoro, chloro, methyl, hydroxy, or methoxy.

39 (new). A compound as claimed in Claim 38, in which R<sup>2</sup> is phenyl substituted in the 4 position by chloro, amino, vinyl, methylamino, methyl or methoxy, optionally at the 3 position with amino or hydroxy, and optionally at the 6 position with amino or hydroxy.

40 (new). A compound as claimed in Claim 38, in which R<sub>2</sub> represents indol-6-yl optionally substituted at the 3 position by chloro, bromo, methyl or methoxy or indol-6-yl substituted at the 5 position by chloro, fluoro or hydroxy and optionally substituted at the 3 position by chloro or methyl.

41 (new). A pharmaceutical composition, which comprises a compound as claimed in Claim 29 together with at least one pharmaceutically acceptable carrier or excipient.